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ALS – ELD USER MANUAL



VERSION 2.0

Davinderpal Singh
ARETHOS

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INTRODUCTION

ABOUT ELECTRONIC LOGGING DEVICE

All operators of Commercial Motor Vehicles in the United States and Canada are currently required to log their hours of operations. With a view to improve safety and recording of Hours of Service, Congress in the United States mandated the electronic logging device (ELD) rule. The ELD rule mandates electronically recording data from the Electronic Computer Module of Commercial Motor Vehicles for heightened accuracy in Hours of Service, track, manage, and share records of duty status data

ABOUT ARETHOS

From Greek Words ...

ARETE Excellence through the involvement of all abilities and potentialities – strength, knowledge, bravery, virtue and wit.

ETHOS Ethics, integrity and other guiding beliefs and ideals that characterize a community, nation or ideology.

ABOUT ALS- ELD

ALS-ELD is part of our **Arethos Logistics System (ALS)**. It can be used as a single component or combined with the logistics product. If company is using as combined product then the driver, truck, trailer and load information is automatically updated once the trip is assigned to the driver.

ALS-ELD is compatible with all kind of mobile device which are running Android And iOS platform.

SETTING UP USER PROFILE

INITIALISING YOUR PROFILE TO START USING THE ELD

In order to initialize and access the ELD device, the Carrier Company has to first access the web-portal, and set up an individualized user's profile.

PROFILE SET UP

1. The profile will require basic and required information from the User to set up a Profile.
2. The portal operator will set up a user name and password, credentials that are required for future authentication.

DOWNLOAD THE APP

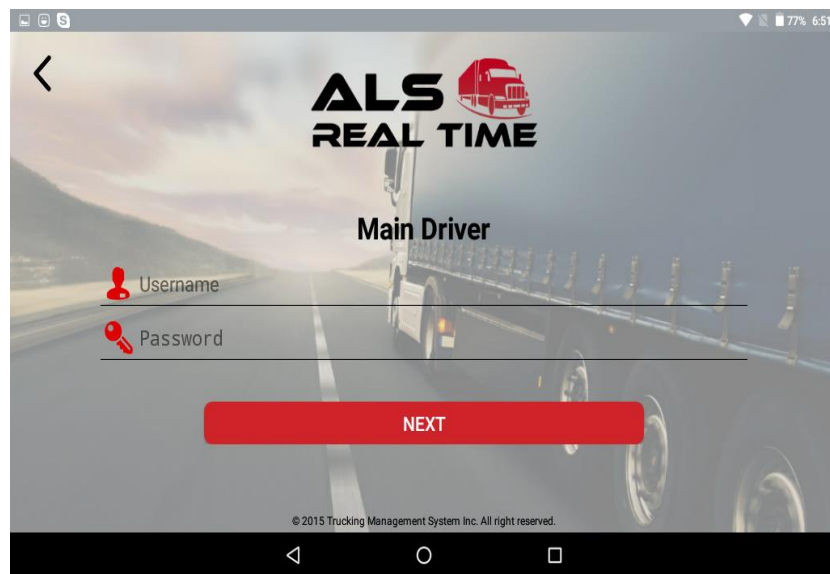
3. Download the mobile Application from APP store for IOS/ Apple devices or from Google Play Store for Android devices, on to your WIFI capable Devices, such as mobile device or a Tablet, that you will be using in the Commercial Motor Vehicle during the trip.

LOGGING INTO THE SYSTEM

The steps for logging into the system are as follows: -

- 1.) Launch the ELD app in the tablet.
- 2.) Use the **Valid credentials** provided by the company to login into the app.
- 3.) For Single Driver login, Enter the valid username and password in the required fields.
- 4.) For Team Driver login, Enter the valid username and password in the **Main driver** and **Co- driver** in the required fields.
- 5.) Click on Sign in button to view HOS Main screen.

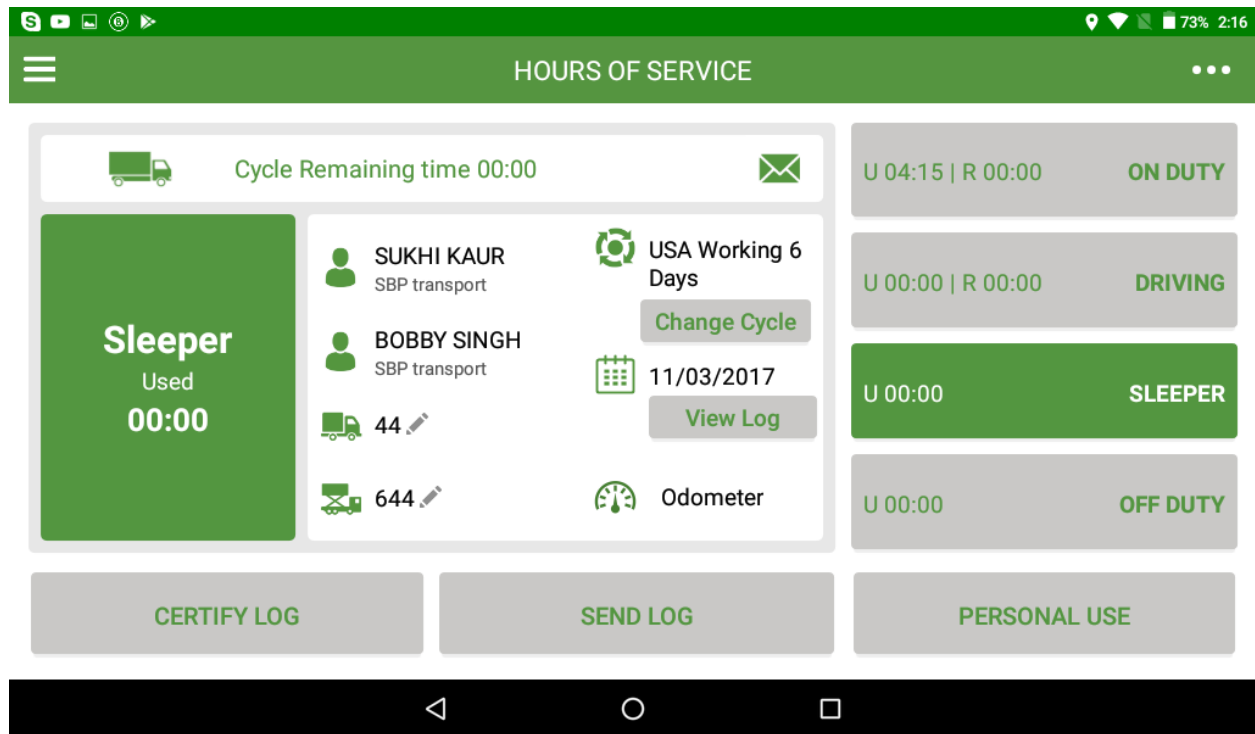
Fig 1.1



CONTINUE.....

Upon successful login user will see the following screen:

Fig 1.2



The UI is kept very simple so that it will be very easy for driver to use. In order to change any statuses driver just need to click on any one of the five buttons. Upon clicking the button it will automatically update the statuses of the driver and also calculate the number of hours used and remaining.

HOS SCREEN FOR CURRENT USER

How to change duty status?

1.) **HOS** log screen shows all the types of duty statuses:

ONDUTY shows driver is on-duty but not driving the vehicle.

DRIVING shows driver is driving the vehicle.

SLEEPER shows driver is in Sleeper Berth.

OFF DUTY shows driver is not in the vehicle and is on break.

PERSONAL USE shows Driver is Off-duty and is using the vehicle for personal conveyance.

2. To **Change** the duty status just tap the required status button from the following.

Fig 1.3



HOW AUTHORISED PERSONAL USE AND YARD MOVE WORKS

AUTHORISED PERSONAL USE:

1. An Operator can change record periods when using the vehicle for authorized personal use. This may include the time traveling between an Operator's home and Terminal (or normal work reporting location), and traveling short distances (from terminals or motels) to restaurants. These periods of personal use may be considered off-duty time.
2. However, an Operator who uses a vehicle for transportation from home and is later dispatched from home would be on-duty from the time the driver leaves home.
3. An ELD does not change the duty status following a period of personal conveyance status. The driver should change the duty status to off-duty before powering off, or later annotate the record to explain off-duty status at the end of the driving time.

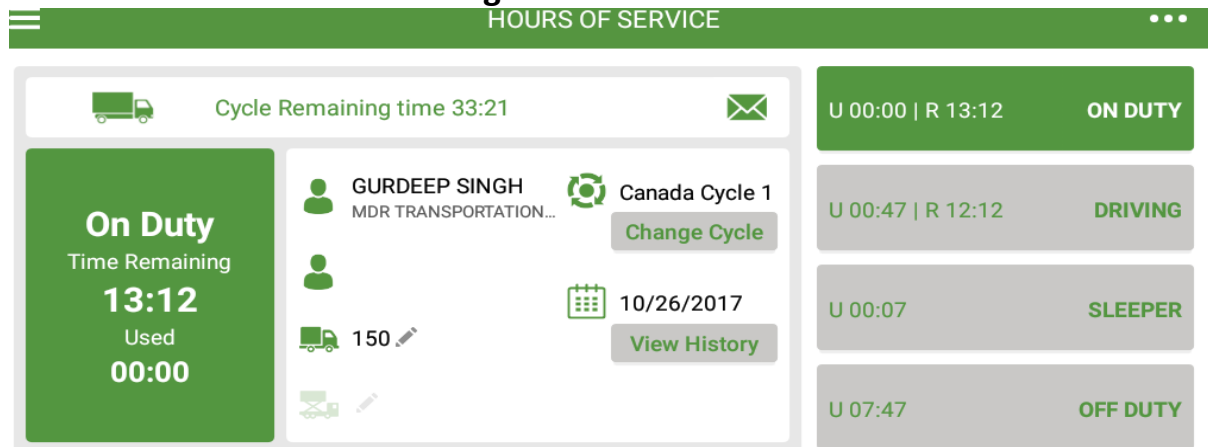
YARD MOVES:

1. An Operator can record periods of Yard-Moves under the ON Duty Status. An Operator can annotate the record to document sudden bad weather, crashes, or other unforeseeable conditions.
2. The ELD records data every hour when the vehicle is moving, and there has not been a Duty Status change or intermediate recording in the previous hour.

DESCRIBING HOURS AVAILABLE ON HOS SCREEN

- 1.) Total hours consumed and remaining for each duty status will appear on the duty status buttons.
- 2.) Selected duty status will appear on left side of the screen with total hours consumed and remaining.

Fig 1.4



- 3.) Selected cycle weekly hours left will appear and update as time spent on duty Status updated.
- 4.) As soon as driver change the duty status used time starts increasing dynamically.
- 5.) The hours shown, are the hours left as per the rule (**USA/Canada** in accordance to Motor Vehicle Act) selected by the user.

CONTINUE.....

6.) For a vehicle which is not moving but status is **driving** for more than 5 min, an alert will appear showing the Driver that “**Your Status is Driving but Vehicle is not moving**”. It will keep on displaying after every minute until driver won’t change its required status.

7.) User can view daily log history by tapping the “**View History**” button.

8.) For a Vehicle which is moving but status is **On-duty** for more than 5 min, an alert will appear showing that “**Your Vehicle is moving but status is not driving**”. It will keep on displaying after every minute until driver won’t change its required status.

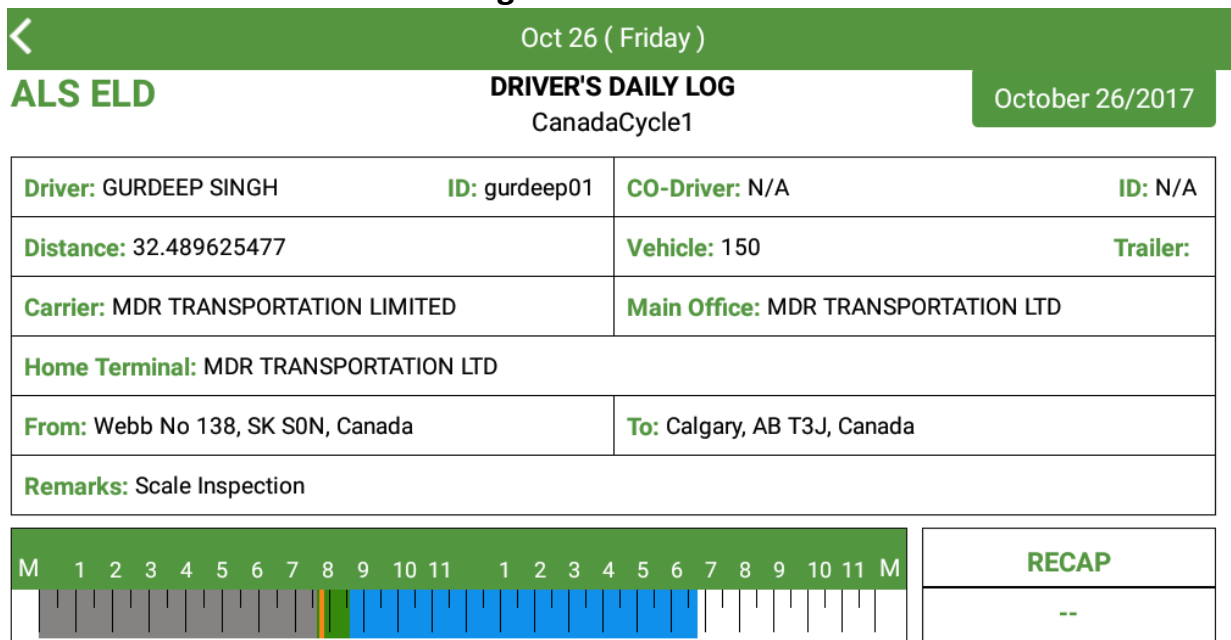
9.) The Canadian work shift is made of 16 hours and US work shift is 14 hours, which is an accumulation of **On Duty, Off Duty, Sleeper Berth and Driving**. The Off Duty shall be more than 8 or 10 consecutive hours for the system to reset the daily driving and work shift to reset based upon current hours of service rule selected by the driver.

10.) The total weekly hours will be rescheduled once the user takes a minimum of **34 or 36** consecutive hours of **Off Duty**.

TO VIEW CURRENT / PREVIOUS DAY LOG

- 1.) Driver can view his/her current day log history by tapping the “**View History**” button and can click the “**View**” button to view his daily log.
- 2.) To view previous day log, driver can select the required date from the calendar to view his/her previous day log.

Fig 1.5



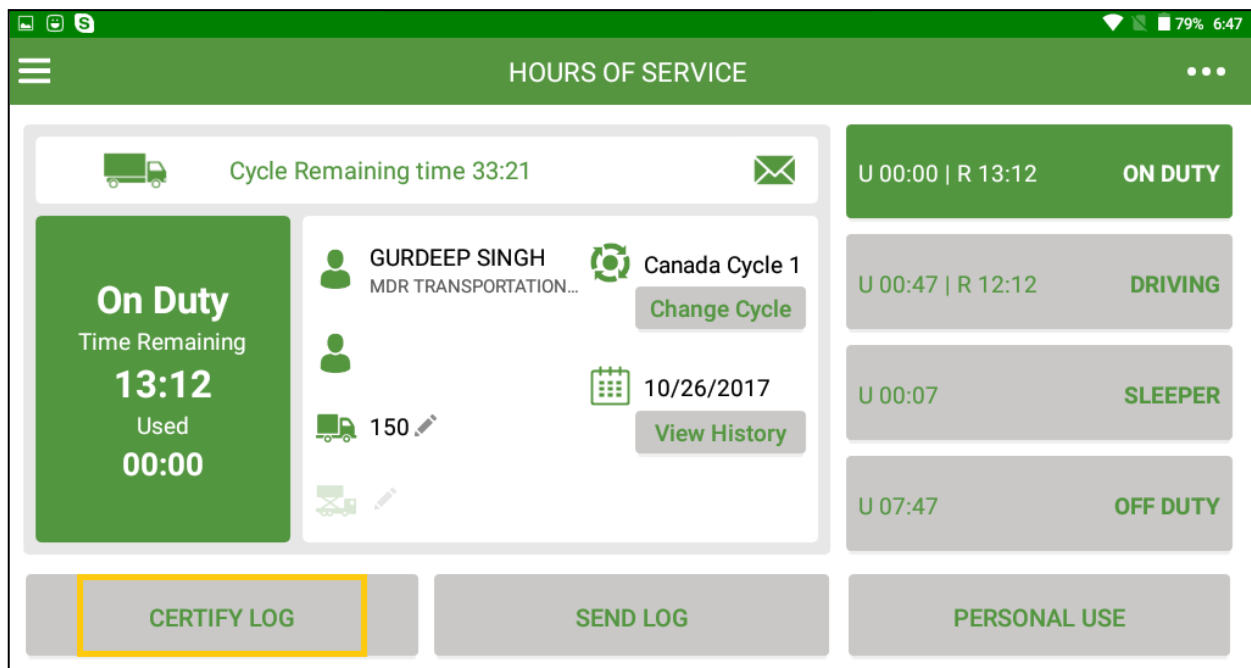
- 3.) User can view Daily log graph where different colors indicating the hours consumed for different duty statuses.



HOW TO CERTIFY THE LOG?

- 1.) The objective of certification of the daily log is to make the driver take the ownership of each 24-hour log.
- 2.) In event of any change/edits to the log, the driver has to re-certify the log.

Fig 1.6



- 3.) To certify a log, select the **Certify Log** button and log then log screen will appear.
- 4.) Sign the HOS daily log by simply doing signature and Click **Save** button to Save the signatures. User can update the signature by deleting older any-time before Saving. Once saved it can't be **edited/change**.

CONTINUE.....

Fig 1.7

M 1 2 3 4 5 6 7 8 9 10 11 N 1 2 3 4 5 6 7 8 9 10 11 M												
OFF												01.00
SB												00.00
D												03.14
ON												00.00

No.	Status	Start (Time)	Duration	Location	Remarks
1.	Off Duty	12:00	03:45	City Name	64345786
2.	Drive	01:00	03:23	City Name	643675Drive
3.	Off Duty	09:00	07:23	City Name	Fuel
4.	On Duty	12:00	03:43	City Name	DHJ4683

RECAP	
9/12	0.00
Restart on 9/13	
9/13	10.25
9/14	11.27
9/14	10.65
Total Hours Since Restart	
Hrs Available today	
Hrs worked Today	

Odometers			
Vehicle	Start	End	Distance
289	1330399	13314611	11984212

I certify that these entries are true and correct

Driver's Sign

CHANGING HOURS OF SERVICE RULE BETWEEN CANADA/USA

- 1.) The system will change the driver HOS rules automatically whenever the driver crosses the borders between the USA and Canada and Cycle name will be displayed in HOS screen.
- 2.) Upon changing the HOS rules automatically, the number of hours one was operating in the **US** and **Canada rule** will also get updated in the HOS main screen.
- 3.) A Notification will be appearing to the driver that “**Your cycle is changed**” whenever he/she crosses the Country border of US and CANADA.

HOW TO SEND LOG?

- 1.) To send the certified log to the **FMCSA**, user will simply tap the “**Send log**” button and will enter the valid email id and log Start /End Date and will Click on the “**Share**” button to send the log.

Fig 1.8

The screenshot shows a mobile application interface titled "HOURS OF SERVICE" with a green header bar containing the text "Send Driver Log". Below the header, the form includes the following fields and controls:

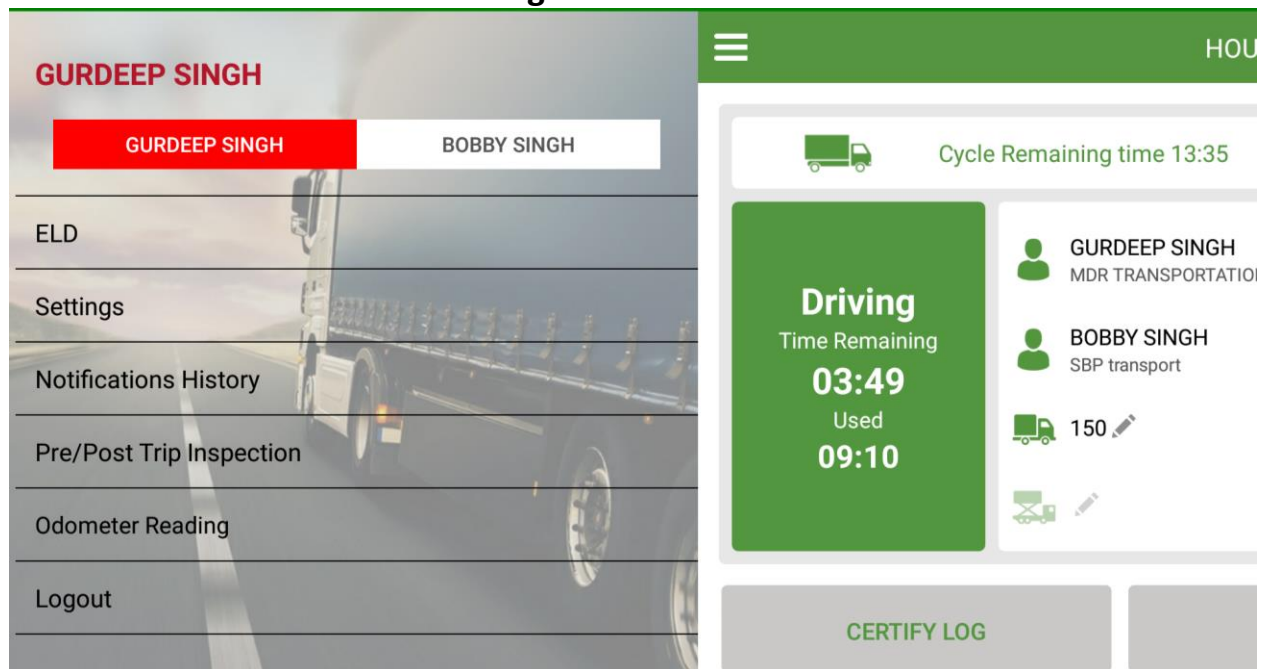
- Data Transmission Through:** Two checked checkboxes, "Email" and "Service".
- To:** A text input field containing the word "Email".
- Location:** A text input field containing "No Location", with a green "Change" button to its right.
- From Date:** A text input field with a date placeholder "mm/dd/yyyy".
- To Date:** A text input field with a date placeholder "mm/dd/yyyy".
- Comments:** A large text area with a placeholder "Comments".
- Buttons:** At the bottom, there are two buttons: a grey "Cancel" button and a green "Share" button.

- 2.) The certified log will be sent to **FMCSA** via **email** or by using **web service**.

SWITCHING BETWEEN DRIVERS (TEAM LOGIN)

- 1.) **Team Driver** can easily switch from **Main driver** to **Co-Driver** or vice versa by simply tapping on Driver name appearing in side menu.

Fig 1.9

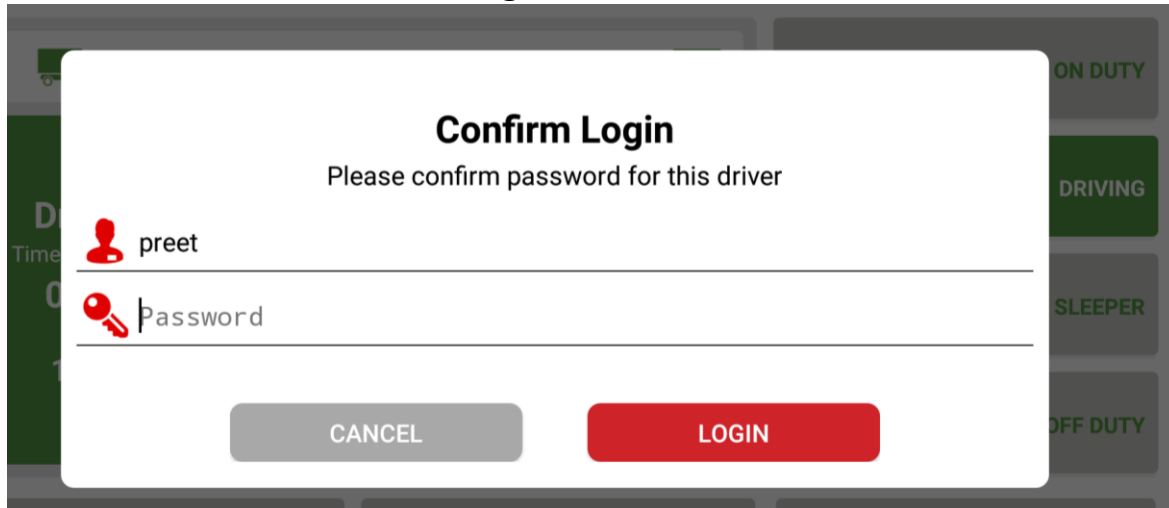


- 2.) ELD events/data that can be accessed are specific to the driver account that's logged in, protecting the authenticity and confidentiality of the collected information.

CONTINUE.....


- 3.) User will enter his valid credentials every time switching between each other.


Fig 1.10

A screenshot of a mobile application interface showing a 'Confirm Login' dialog box. The dialog box is white with a rounded rectangle and is centered over a blurred background of the application's main screen. The background shows a green sidebar with buttons labeled 'ON DUTY', 'DRIVING', 'SLEEPER', and 'OFF DUTY'. The dialog box has a title 'Confirm Login' in bold black text, followed by the instruction 'Please confirm password for this driver'. Below this, there are two input fields. The first field has a red person icon and the text 'preet'. The second field has a red key icon and the text 'Password'. At the bottom of the dialog box, there are two buttons: a grey 'CANCEL' button and a red 'LOGIN' button.

Confirm Login

Please confirm password for this driver

 preet

 Password

CANCEL LOGIN

- 4.) Upon login with different driver, user will see specific info associated to his account.

PRE / POST TRIP INSPECTION

Every motor carrier driver, agents, representatives and employees directly concerned with the inspection or maintenance of commercial motor vehicles must be knowledgeable of and comply with the rules of this part.

Driver vehicle inspections are important to safe operation of a commercial vehicle.

PRE TRIP INSPECTION:

The pre-trip inspection can identify vehicle defects prior to the movement of the vehicle for the safety of the driver and motorist and this must be signed and checked by the driver.

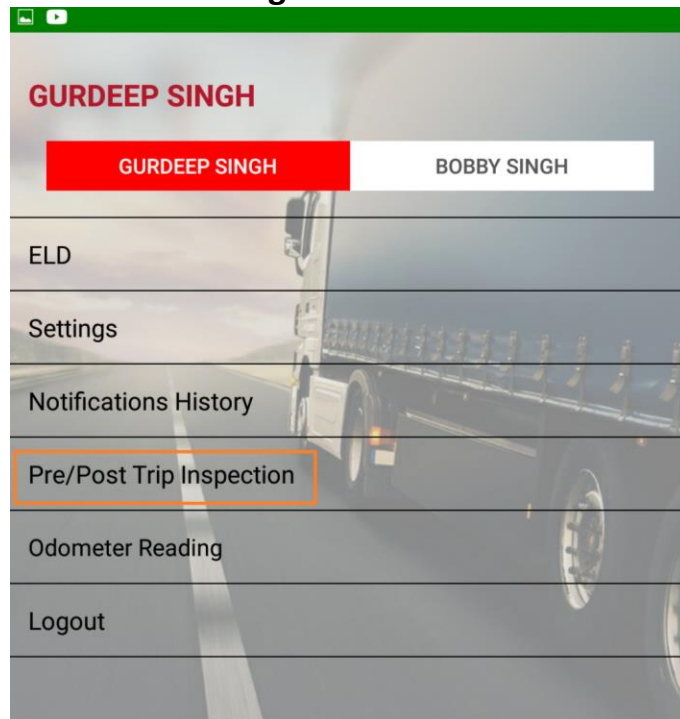
POST TRIP INSPECTION:

The post- trip report must identify the vehicle and list any defect or deficiency discovered by or reported to the driver after the trip is completed, which would affect the safety of operation of the vehicle or result in its mechanical breakdown. If a driver operates more than one vehicle during the day, a report must be prepared for each vehicle operated.

CONTINUE.....

- 1.) To Start a **Pre/Post** trip inspection user must select the option from side menu highlighted in the fig below.

Fig 2.1



- 2.) Upon clicking **Pre/post** trip inspection option from menu user will see defects list and can select the defects that can be corrected by mechanic/supervisor.
- 3.) Vehicle will be supervised by the mechanic/supervisor and signed by the both driver and mechanic that defects have been corrected and vehicle is safe for driving.

DATA DIAGNOSTICS AND MALFUNCTIONS

The ELD identifies data diagnostics and malfunctions with the status either indicating “detected” or “cleared”. The following errors are captured.

A. DATE AND TIME SYNCHRONIZATION

The ELD synchronizes with Coordinated Universal Time (UTC) in each 5-minute interval.

B. ERROR NOTIFICATIONS, MARKED “DETECTED” OR “CLEARED”

1. A **“Data Recording Compliance Malfunction”** notification is pushed to mobile application upon a loss connection.
2. A **“Timing”** malfunction detection notification is pushed when, the ELD fails to synchronize with Coordinated Universal Time (UTC) in each 5-minute interval.
3. A **“Power Data Diagnostic Events”** notification is pushed to mobile application, when an ELD is not powered and fully functional within one minute of the vehicle’s engine receiving power and does not remain powered for as long as the vehicle’s engine stays powered.
4. A **“Power Compliance Malfunctions”** a notification is pushed to mobile application, when an ELD is not powered for an aggregated in-motion driving time of 30 minutes or more over a 24-hour period across all driver profiles.

CONTINUE.....

5. A “**Position Compliance Malfunction**” a notification is pushed to mobile application when an ELD fails to acquire a valid position measurement within miles of the commercial motor vehicle moving.

6. A “**Data Transfer and/or Data Diagnostic Event**” a notification is pushed to mobile application when the operation of the data transfer mechanism(s) is not confirmed.

7. A “**Data Transfer Compliance**” is a notification is pushed to mobile application, when a malfunction occurs when the ELD stays in the unconfirmed data transfer mode following the next three consecutive monitoring checks.

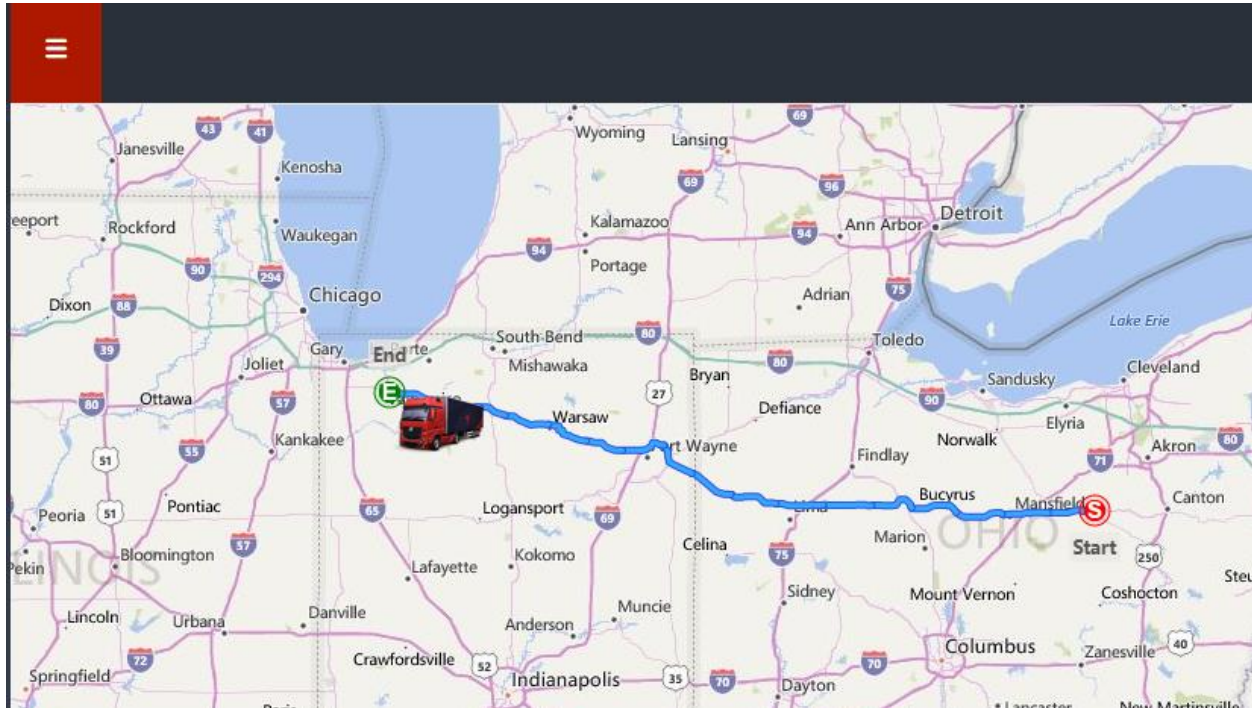
8. An “**Unidentified Driving Records Data Diagnostic Event**” a notification is pushed to mobile application, when more than 30 minutes of driving time for an unidentified driver is recorded within a 24-hour period.

MALFUNCTIONING PROCEDURE

1. Users are strongly urged to carry a spare ELD device on-board in the event the ELD device in use malfunctions. In such an event, the Operator can swap the ELD device, login to the existing trip with the alternative ELD, to ensure continuity of the Electronic logs, and record collection of the trip.
2. The trip data along with the malfunction notices should be communicated with dispatch upon the Operator's first available safe opportunity.
3. The recording of the driver's hours of service on a paper log cannot continue for more than 8 days after the malfunction; a driver that continues to record his or her hours of service on a paper log beyond 8 days' risk being placed out of service.

GPS LOCATION AND OPERATOR PRIVACY

Fig 2.2



1. Our ELD have the capability to automatically determine the position of the CMV in standard latitude/longitude coordinates with the accuracy.
2. During on-duty periods, our ELD records location with an accuracy of approximately after 1 minute.
3. During off-duty periods (such as using a vehicle for personal use), our ELD records location with an accuracy of approximately 10 miles, to protect Operator privacy.